

Serial No. 10/779,884

Atty Docket DP-310280

## REMARKS

RECEIVED  
CENTRAL FAX CENTER

JUL 26 2007

**Amendment to Claim**

Claim 1 is hereby amended to include the limitation of claim 2 to recite a conical ramp extending out of the first annular groove toward the second annular groove for facilitating movement of the retainer ring out of the first groove and along the shaft to the second groove. No new matter has been added.

Claim 2 is hereby cancelled.

It is requested that the amendments be entered. It is believed that the amendments fully address the concerns raised in the Office Action and place the claims in condition for allowance. In the event that, for some reason, the claims are still deemed not to be allowable, it is nevertheless requested that the amendments be entered, if only for purposes of clarifying issues on appeal.

**Claim Rejection under 35 USC § 103**

Claims 1-7 have been rejected under 35 USC 103(a) as being unpatentable over *Skinner* 4,428,718 in view of *Ota* 6,629,823.

Applicants have attached Fig. 1 of *Skinner* and an enlarged detail section of Fig. 1, labeled as Detail A-A, to assist the Examiner in distinguishing the present invention over *Skinner* in view of *Ota*. Shown in Fig. 1 is a variable displacement compressor having a drive shaft 26 extending along a longitudinal axis. The drive shaft 26 includes a first end (end on right side of Fig. 1), a second end (end on left side of Fig. 1), and is adapted to operatively connected to a swash plate assembly 107. Located between the second end and the swash plate assembly is a

Serial No. 10/779,884

Atty Docket DP-310280

first annular groove, and located between the first annular groove and swash plate assembly is a second annular groove. A split ring return spring 107 is mounted in the second annular groove.

The first annular groove shown in *Skinner* includes two sides that are substantially perpendicular to the longitudinal axis of the shaft. The side of the first annular groove closest to the second annular groove is abruptly truncated and tapered outwardly toward the second annular groove. Abutted against the interface of the perpendicular section and tapered section of the first annular groove is a thrust washer 32. The thrust washer 32 has an inner diameter that is smaller than the outer diameter of the first annular groove. This can be clearly seen in the attached Fig. Detail A-A.

Applicants' invention is patentably distinguishable over *Skinner*. In *Skinner*, the drive shaft 26 is axially retained by the thrust washer 32 inward of the needle bearing 28, wherein the thrust washer 32 is pressed against the cylinder block 20 by the tapered section of the first annular groove. In contrast, Applicants' invention provides for a conical ramp extending smoothly and continuously out of the first annular groove toward the second annular groove *for facilitating movement of the retainer ring out of the first groove* along the shaft to the second groove.

*Skinner* does not disclose a smooth and continuous conical ramp for facilitating the movement of a retainer ring out of the first groove along the shaft to the second groove. In fact, *Skinner* teaches away from Applicants' invention. Fig. 1 of *Skinner* shows an abruptly truncated perpendicular section and a transition tapered section adapted to maintain the position of the thrust washer 32 between the side of the first annular groove and cylinder block 20. *Ota* does not overcome the short comings of *Skinner*. It is requested that the rejection be withdrawn and claims 2 and 3-7 be allowed.

Serial No. 10/779,884

Atty Docket DP-310280

RECEIVED  
CENTRAL FAX CENTER

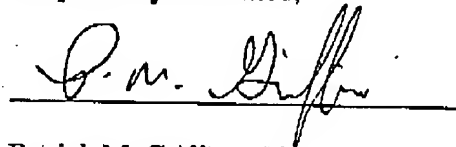
JUL 26 2007

**Conclusion**

Applicants respectfully submit that claims 1 and 3-7 are now currently pending and are in condition for allowance. If it would further prosecution of the application, the Examiner is urged to contact the undersigned at the phone number provided.

The Commissioner is hereby authorized to charge any fees associated with this communication to Deposit Account No. 50-0831.

Respectfully submitted,



Patrick M. Griffin - 29,716  
Delphi Technologies, Inc.  
Legal Staff - M/C 480-410-202  
P.O. Box 5052  
Troy, Michigan 48007-5052  
(248) 813-1215